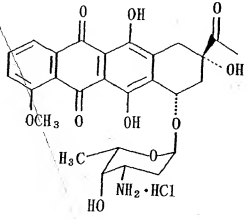
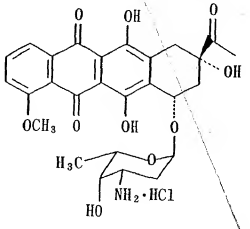
CLAIMS

1. A crystalline form of anthracycline antibiotic represented by the following formula (I) and having at least characteristic 2θ values (in degrees) of 6.18, 7.88, 9.82, 11.60, 13.30, 15.80, 20.88 and 23.12 as measured by the X-ray powder diffraction method.



(I)

2. A process for producing a crystalline form of anthracycline antibiotic represented by the following formula (I) and having at least characteristic 2θ values (in degrees) of 6.18, 7.88, 9.82, 11.60, 13.30, 15.80, 20.88 and 23.12 as measured by the X-ray powder diffraction method,



(I)

from a solution containing the antibiotic, the process comprising the steps of preparing said solution by using a solvent system composed

of a poor solvent for the antibiotic and a good solvent which is miscible with the poor solvent and capable of dissolving the antibiotic; and subjecting the solution so prepared to a crystallization treatment.

3. A process as claimed in claim 2 wherein the poor solvent contains at least 1-butanol.

4. A process as claimed in claim 2 wherein the poor solvent is selected from the group consisting of 1-butanol, 1-butanol / acetone, 1-butanol / hexane and 1-butanol / diisopropyl ether.

5. A process as claimed in claim 2 wherein the poor solvent is selected from the group consisting of 1-butanol, 1-butanol / acetone, 1-butanol / hexane and 1-butanol / diisopropyl ether, and the good solvent capable of dissolving the antibiotic and used in combination with the poor solvent is selected from the group consisting of water, methanol, ethanol and a mixture of two or more of them.

6. A process as claimed in claim 2 which comprises the steps of dissolving 1 part by weight of the antibiotic of formula (I) in 5 to 20 parts by weight of methanol, adding 1-butanol or a solvent mixture comprising 1-butanol / acetone, 1-butanol / hexane or 1-butanol / diisopropyl ether (in which acetone, hexane or diisopropyl ether may comprise up to 60% by volume of the solvent mixture) to the resulting solution in an amount of 1 to 20 parts by volume based on the volume of methanol, and crystallizing the antibiotic at a temperature in the range of 5 to 35°C.

add 1
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